

What Everyone Should Know About Sleep

Part 3 of 3

How much sleep is enough?

Healthy adults on average sleep between 8 and 8.5 hours a night, but sleep needs vary from person to person. Some people need only about 7 hours to avoid problem sleepiness, whereas others need 9 or more hours of sleep. Sleep needs also needs to be changed throughout the life cycle. Newborns sleep between 16 and 18 hours a day, and children in preschool sleep between 11 and 12 hours a day. School aged children and adolescents need at least 10 hours of sleep each night (NIH).

Can you make up for lost sleep during the week by sleeping more on the weekend?

Sleeping on the weekend to make up for lost sleep will help you feel more rested, but it will not completely make up for lack of sleep or correct your sleep debt. This pattern will not make up for impaired performance during the week or the physical problems that can result from not sleeping enough. Furthermore, sleeping later on the weekends can affect your biological clock, making it much harder to sleep at the right time on Sunday nights and get up early on Monday mornings (NIH).

Lack of sleep affects your **Mood** big time. Insufficient sleep can make you irritable and is linked to poor behavior and trouble with relationships, especially among children and teens. People who lack sleeps are more likely to become depressed (NIH).

Do you think you have a sleep disorder? You can keep a diary to record the quality and quantity of your sleep, use of medications, alcohol intake, caffeinated beverages, exercise patterns, and how sleepy you feel in the day. After a week or so, look over the information to see how many hours of sleep or night time awakenings you had that relate to you being tired and sleepy the next day. All this information will give you a sense of how much uninterrupted sleep you need to avoid daytime sleepiness (NIH).

If you answered yes to the following questions, you may have some type of Sleep Disorder.

- Do you feel tired in the morning and sleepy throughout the day, even though you slept throughout the night?
- Do you find yourself tossing and turning and unable to go back to bed?
- Do you feel cranky and irritable during the day?
- Do you sleep for only short periods at a time?
- Do you take frequent naps?

How are Sleep Disorders diagnosed?

- Sleep history log.
- Sleep recording in a sleep laboratory (polysomnogram)
- Multiple sleep latency test (MSLT).

Lifestyle changes include:

- Don't take naps after 3:00pm.
- Avoidance Caffeine, tobacco, and other stimulants at least 8 hours before you go to bed. Avoid heavy meals before bed as well.
- Over the counter and prescription medications that can disrupt sleep. (for example, some cold and allergy medicines) talk with your doctor and ask which medicines wont disrupt sleep.
- Although alcohol makes it easier for some to fall asleep, it can also trigger sleep that tends to be lighter than normal. This makes it more likely that you will wake up during the night. (NIH).

For people who have insomnia and major depressive disorder, CBT combined with antidepressant medicines has shown promise in relieving both conditions (NIH).

Medicines: There are many prescription medicines that are used to treat insomnia. Some are meant for short-term use, while others are meant for longer use. (Talk to your doctor about the benefits and side effects).

Over the counter sleep aides:

Melatonin, L-tryptophan supplements, and valerian teas or extracts. (over the counter medication products that contain antihistamines are sold as sleep aides, they might make you sleepy but talk to your doctor before taking any medication) (NIH).

Tips for getting a good night's sleep:

- Stick to a sleep schedule: Go to bed and wake up at the same time each day. Try to exercise early in the day.
- Focus on breathing deeply, relaxation therapy can help your body and mind slow down so that you can fall asleep more easily at bedtime.
- Meditation
- Physical relaxation techniques, such as progressively tensing and then relaxing each of the muscle groups in your body before sleep.
- Listen to calming music like the sounds of the ocean.
- Take a hot bath before bed.
- Have a good sleeping environment: No bright light, cool temperature, no television, no cell phone, and make sure you have a comfortable mattress and pillow which promotes a good night's sleep.
- Don't lie in bed awake. If you find yourself still awake after 20 min and you start to feel anxious or worried, get up and do some relaxing activity until you feel sleep (read a book). The anxiety of not being able to sleep can make it harder to fall asleep.
- Most important, if you suspect you have a sleep disorder, such as insomnia, sleep apnea or any other symptoms of sleep disorder see your doctor immediately.

THAT IS IT FOR OUR INSTALLMENT OF THE SLEEP SERIES!

Good Night!

-Amira Rehawi

What Everyone Should Know About Sleep

Part 2 of 3

What is Insomnia?

Insomnia is defined as having trouble falling asleep or staying asleep. Life is filled with events that occasionally cause insomnia for a short time. Insomnia is common and is often brought on by situations such as stress at work, family pressures, or a traumatic event. A National Sleep Foundation poll of adults in the United States found that close to half of the respondents reported temporary insomnia in the nights immediately after the terrorist attacks on September 11, 2001 (NIH).

What is chronic insomnia?

Chronic insomnia is defined as having symptoms at least 3 nights per week for more than 1 month. Chronic insomnia is often caused by a disease or mood disorder. The most common causes of insomnia are depression and/or anxiety disorders. Neurological disorders, such as Alzheimer's or Parkinson's disease, also can have insomnia or symptom. Chronic insomnia can result from thyroid dysfunction, arthritis, asthma, or other medical conditions in which symptoms become more troublesome at night, making it difficult to fall asleep or stay asleep (NIH).

What disrupts sleep?

There are many factors that can disrupt our sleep patterns such as **coffee, pain relievers and decongestants**. Many people depend on Caffeine to help them stay awake and get them through the day, not realizing that it may also be keeping them awake at night. It can take 6-8 hours for the effects of caffeine to wear off completely (NIH).

Nicotine is another stimulant that can keep you awake. Nicotine also leads to lighter than normal sleep, and heavy smokers tend to wake up too early because of nicotine withdrawal (NIH).

Although **alcohol** acts as a sedative that makes it easier to fall asleep, it prevents deep sleep and REM sleep, allowing only the lighter stages of sleep (NIH).

Prescription and over-the-counter medicines contains ingredients that can keep you awake. Many medicines taken to relieve headaches contain caffeine (NIH).

People who have **chronic asthma or bronchitis** also have more problems falling asleep and staying asleep than healthy people, either because of their breathing difficulties or because of the medicines they take. Other chronic painful or uncomfortable conditions such as, **congestive failure, and sickle cell anemia** can disrupt sleep too (NIH).

Psychological disorders including schizophrenia, bipolar, and anxiety disorders are well known for disrupting sleep.

Psychological stress also takes a toll on sleep. People who feel stressed spend less time sleeping.

Losing a loved one, going through a divorce or being under stress at work can make it very difficult to sleep (NIH).

Menstrual cycle hormones can affect how well women sleep.

Women in their late forties and early fifties report more difficulties sleeping (insomnia) than younger women. These difficulties are linked to **menopause**, when they have lower concentrations of progesterone. Hot flashes in women of this age also may cause sleep disruptions and difficulties (NIH).

Large meals before bedtime as well as vigorous exercise can make it harder to fall asleep, although exercise in the daytime is often associated with improved nighttime sleep (NIH).

Snoring is common and annoying which can keep your partner up all night, but frequent loud snoring is often a sign of **sleep apnea** and may increase your risk of developing cardio-vascular disease and diabetes. Snoring can also lead to daytime sleepiness and impaired performance (NIH).

How is insomnia treated?

Many people treated insomnia by making big lifestyle changes. These changes certainly help relieve short term insomnia and might make it easier to fall asleep and stay asleep.

Treatment: A type of counseling called Cognitive –Behavioral Therapy (CBT) can help relieve the anxiety linked to chronic (ongoing) insomnia. Anxiety tends to prolong insomnia. CBT targets the thoughts and actions that can disrupt sleep. This therapy encourages good sleep habits and uses several methods to relieve sleep anxiety. (NIH).

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Good Night!

-Amira Rehawi

What Everyone Should Know About Sleep

Importance of Sleep

While most of us take a good night's sleep for granted, many adults and children suffer from different types of sleep disorders. Sleep is essential to our health and not only does the quantity of sleep matter, but also the quality of it is important as well. Feeling well rested and being able to function the next day depends on the total sleep time and how much of the various stages of sleep you get each night. Cutting back sleep by only 1 hour can make it tough to work the next day and slow your response time.

According to the National Heart, Lung, and Blood Institute "More than 70 sleep disorders affect at least 40 million Americans and account for an estimated \$16 billion in medical costs each year not counting costs due to lost work time, car accidents, and other factors. The four most common sleep disorders are insomnia, sleep apnea, restless legs syndrome, and narcolepsy. Additional sleep problems include chronic insufficient sleep, circadian rhythm abnormalities, and "parasomnias" such as sleep walking, sleep paralysis, and night terrors" (NIH).

What is sleep?

Normal sleep is characterized by a general decrease in body temperature, blood pressure, breathing rate, and most other bodily functions. In contrast, the human brain never decreased inactivity. Studies have shown that the brain is as active during sleep as it is when awake. Throughout an eight-hour sleep cycle, a normal adult alternates between two very different states, non-REM and REM (Rapid Eye Movement) sleep (NIH).

REM vs Non-REM

REM stands for rapid eye movement. In this cycle, your eyes move quickly in different directions and your body is paralyzed. This does not happen during non-REM sleep. During sleep the non-REM cycle is first, then a shorter cycle of REM sleep, which is the repeating pattern. Dreams usually happen during REM sleep.

The non-REM sleep cycle lasts from 5 to 15 minutes in a series of three phases. The first stage lasts for up to 10 minutes, but it is easy to wake up. The second stage is light sleep where the heart rate decreases and the body temperature drops. The final stage is deep sleep and in this stage it is harder to wake up. This stage is the most important because the body repairs and regrows tissues, builds bone and muscle and strengthens the immune system during this time. If you are awakened from this stage you will feel disoriented. As you get older your deeper sleep pattern decreases, which means that you are likely to remain in the first two stages of non-REM longer than the final stage.

REM sleep can happen 90 minutes after falling asleep. The first period lasts for about 10 minutes. REM sleep stages get longer and may last up to an hour. During this time period the heart rate and breathing increase. The brain is more active during REM sleep.

Lack of sleep can cause other symptoms. You may wake up feeling tired or not well-rested, and you may feel tired during the day. You also may have trouble focusing on tasks. Insomnia can cause you to feel anxious, depressed, or irritable". Insomnia also can affect your daily activities and cause serious problems. For example some people who don't get enough sleep will feel drowsy while driving and this may cause serious car crash injuries. It can also affect your behavior in the work place and can make you do incompetent things which can lead to losing your job (NIH).

While you are sleeping, your brain stays active throughout sleep, but different things happen during each stage. Certain stages are needed to help you stay focused and energetic the next day, and other stages help you learn and make memories (NIH).

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GOOD NIGHT!
-AMIRA REHAWI